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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/277,482	03/26/1999	DEAN A. KLEIN	MPATENT.052A	3615

20995 7590 01/30/2004

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EXAMINER	
SONG, HOSUK	

ART UNIT	PAPER NUMBER
2135	13

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/277,482	Applicant(s) KLEIN, DEAN A.
	Examiner Hosuk Song	Art Unit 2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *3 and 18-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *3/26/99* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/2003 has been entered.

Objection

2. Claim 4 is objected.

Claim 4: Claim 4 is depended on cancelled claim 3. For purpose of examination the examiner will assume claim 4 is depended on claim 1. Please make an appropriate correction.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6,9-10,16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regard as the invention.

Claim 1: recites the limitation "said logic circuit" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 4: recites the limitation "said logic circuit". There is insufficient antecedent basis for this limitation in the claim.

Claim 5: recites the limitation "said logic circuit". There is insufficient antecedent basis for this limitation in the claim.

Claim 9: recites the limitation "said logic circuit". There is insufficient antecedent basis for this limitation in the claim.

Claim 16: recites the limitation "said logic circuit". There is insufficient antecedent basis for this limitation in the claim.

Claims 2,6,10,17 are rejected because of dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-2,4-17 are rejected under 35 U.S.C.103(a) as being unpatentable over Dumas et al.(US 6,199,163) in view of Pond et al.(US 4,864,616).

Claims 1,2,4,6: Dumas disclose a data storage device in (fig.,#14). Dumas disclose a bus-to-bus bridge configured to receive digital data from a host processor and to forward the digital data to digital data storage device in an encrypted form wherein bus-to bridge is configured to encrypt digital data and forward the digital data to the digital storage device without intervention of the host processor in (fig.2 and col.2,lines 22-42). Dumas disclose a configuration register in the bus-to-bus bridge is adapted to store information that is used by the bus-to-bus bridge to selectively enable and disable encryption depending on the target device that is used to receive the data that is transmitted via the bus-to-bus bridge in (col.3,lines 23-29 and fig.2). Dumas disclose a non-volatile memory location in or connected to logic circuit, which

stores an identification code in (col.2,lines 51-54). Dumas does not specifically disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code. Pond's patent disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code in (fig.1). Note that ID's such as machine ID,config ID,primary ID are used to generate various keys,which inputted to a key stream generator for generating key streams (col.5,lines 44-59;col.3,lines 19-23). It would have been obvious to person of ordinary skill in the art at the time invention was made to derive a key at least in part from identification code as taught in Pond with key system disclosed in Dumas because it makes harder for hackers to create or generate key without knowing identification code. It adds extra layer of security against data intruders trying to defeat the system.

Claim 5: Dumas disclose logic circuit additionally comprises a circuit for selectively disabling logic circuit from encrypting digital data in (fig.6,7).

Claims 7,9-10: Dumas disclose a data storage device in (fig.,#14). Dumas disclose a bus-to-bus bridge configured to receive digital data from a host processor and to forward the digital data to digital data storage device in an encrypted form wherein bus-to bridge is configured to encrypt digital data and forward the digital data to the digital storage device without intervention of the host processor in (fig.2 and col.2,lines 22-42). Dumas does not specifically disclose a plurality of data storage media drives. Examiner takes Official notice that CD-ROM drive,DVD-ROM drive,floppy drive are well known features in the computing device such as PC. One of ordinary skill in the art would have been motivated to use plurality of media drives in order to process and store mass amount of data in order to minimize system slow down. Dumas disclose a configuration register in the bus-to-bus bridge is adapted to store information that is used by the bus-to-bus bridge to selectively enable and disable encryption

depending on the target device that is used to receive the data that is transmitted via the bus-to-bus bridge in (col.3,lines 23-29 and fig.2). Dumas disclose a non-volatile memory location in or connected to logic circuit which stores an identification code in (col.2,lines 51-54). Dumas does not specifically disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code. Pond's patent disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code in (fig.1). Note that ID's such as machine ID,config ID,primary ID are used to generate various keys,which inputted to a key stream generator for generating key streams (col.5,lines 44-59;col.3,lines 19-23). It would have been obvious to person of ordinary skill in the art at the time invention was made to derive a key at least in part from identification code as taught in Pond with key system disclosed in Dumas because it makes harder for hackers to create or generate key without knowing identification code. It adds extra layer of security against data intruders trying to defeat the system.

Claim 8: Dumas disclose hard disk drive in (fig.1,#14).

Claims 11,12: Dumas disclose a data storage device in (fig.,#14). Dumas disclose a bus-to-bus bridge configured to receive digital data from a host processor and to forward the digital data to digital data storage device in an encrypted form wherein bus-to bridge is configured to encrypt digital data and forward the digital data to the digital storage device without intervention of the host processor in (fig.2 and col.2,lines 22-42). Dumas disclose a configuration register in the bus-to-bus bridge is adapted to store information that is used by the bus-to-bus bridge to selectively enable and disable encryption depending on the target device that is used to receive the data that is transmitted via the bus-to-bus bridge in (col.3,lines 23-29 and fig.2). Dumas disclose a non-volatile memory location in or connected to logic circuit which stores an identification code in (col.2,lines 51-54). Dumas does not specifically disclose a key

accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code. Pond's patent disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code in (fig.1). Note that ID's such as machine ID,config ID,primary ID are used to generate various keys,which inputted to a key stream generator for generating key streams (col.5,lines 44-59;col.3,lines 19-23). It would have been obvious to person of ordinary skill in the art at the time invention was made to derive a key at least in part from identification code as taught in Pond with key system disclosed in Dumas because it makes harder for hackers to create or generate key without knowing identification code. It adds extra layer of security against data intruders trying to defeat the system.

Claims 13-15: Dumas disclose a data storage device in (fig.,#14). Dumas disclose a bus-to-bus bridge configured to receive digital data from a host processor and to forward the digital data to digital data storage device in an encrypted form wherein bus-to bridge is configured to encrypt digital data and forward the digital data to the digital storage device without intervention of the host processor in (fig.2 and col.2,lines 22-42). Dumas disclose a configuration register in the bus-to-bus bridge is adapted to store information that is used by the bus-to-bus bridge to selectively enable and disable encryption depending on the target device that is used to receive the data that is transmitted via the bus-to-bus bridge in (col.3,lines 23-29 and fig.2). Dumas disclose a non-volatile memory location in or connected to logic circuit which stores an identification code in (col.2,lines 51-54). Dumas does not specifically disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code. Pond's patent disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code in (fig.1). Note that ID's such as machine ID,config ID,primary ID are

used to generate various keys,which inputted to a key stream generator for generating key streams (col.5,lines 44-59;col.3,lines 19-23). It would have been obvious to person of ordinary skill in the art at the time invention was made to derive a key at least in part from identification code as taught in Pond with key system disclosed in Dumas because it makes harder for hackers to create or generate key without knowing identification code. It adds extra layer of security against data intruders trying to defeat the system.

Claims 16-17: Dumas disclose a data storage device in (fig.,#14). Dumas disclose a bus-to-bus bridge configured to receive digital data from a host processor and to forward the digital data to digital data storage device in an encrypted form wherein bus-to bridge is configured to encrypt digital data and forward the digital data to the digital storage device without intervention of the host processor in (fig.2 and col.2,lines 22-42). Dumas disclose a configuration register in the bus-to-bus bridge is adapted to store information that is used by the bus-to-bus bridge to selectively enable and disable encryption depending on the target device that is used to receive the data that is transmitted via the bus-to-bus bridge in (col.3,lines 23-29 and fig.2). Dumas disclose a non-volatile memory location in or connected to logic circuit which stores an identification code in (col.2,lines 51-54). Dumas does not specifically disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code. Pond's patent disclose a key accessed by logic circuit to define at least in part an encryption process, wherein the key is derived at least in part from identification code in (fig.1). Note that ID's such as machine ID,config ID,primary ID are used to generate various keys,which inputted to a key stream generator for generating key streams (col.5,lines 44-59;col.3,lines 19-23). It would have been obvious to person of ordinary skill in the art at the time invention was made to derive a key at least in part from identification code as taught in Pond with key system disclosed in Dumas because it makes harder for

hackers to create or generate key without knowing identification code. It adds extra layer of security against data intruders trying to defeat the system.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 703-305-0042. The examiner can normally be reached on Tue-Fri from 5:30 am- 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

**HS*